

1. A recording/reproducing apparatus in which a recording signal is written onto a disk, comprising:

a buffer which temporarily stores the recording signal; and

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a control circuit which controls the recording of the recording signal onto the disk during the recording of the recording signal onto the disk so as to interrupt the recording of the recording signal onto the disk when an amount of the recording signal data in the buffer is not greater than an interruption setting value, and to resume the recording of the recording signal onto the disk when the amount of the recording signal data in the buffer is not less than a resumption setting value during the recording of the recording signal onto the disk,

wherein the control circuit reproduces the signal written on the disk before the recording is resumed; records, based on this reproduced signal, the recording signal after resuming the recording onto the disk in continuation with the recording signal before the interruption; and detects the recording properties of the disk based on the signal reproduced before the recording is resumed.

2. The apparatus according to claim 1, wherein when recording is resumed, the control circuit sets recording conditions based on the detected recording properties.

3. A method for recording/reproducing comprising:

controlling the recording of a recording signal onto a disk so that the recording signal is recorded onto the disk at a constant linear speed; and

interrupting the recording of the recording signal onto the disk, reproducing the signal writing on the disk before resuming a

reproducing/recording operation, and detecting the recording properties of the disk based on the reproduced signal in order to set the linear speed.

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4. The recording/reproducing method according to claim 3, further including setting the linear recording speed when recording is resumed in accordance with [said] the detected recording properties.

5. The recording/reproducing method according to claim 3, further including setting the linear recording speed when recording is resumed in accordance with the recording properties detected based on the reproduced signal reproduced at the linear speed at the time of interruption of recording.

6. The recording/reproducing method according to claim 5, further including setting the linear recording speed to a speed higher than the linear speed at the time of interruption of recording and of resuming a recording operation, when the detected recording properties fulfill predetermined criteria.

7. The recording/reproducing method according to claim 5, further including resuming a recording operation without changing the linear recording speed, when the detected recording properties fulfill predetermined criteria.

8. The recording/reproducing method according to claim 5, further including reducing the linear recording speed and resuming a recording operation, when the detected recording properties do not meet predetermined criteria.

9. The recording/reproducing method according to claim 5, further including lowering the linear recording speed and resuming a recording operation, when the detected recording properties indicate that reproduction is not possible.

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10. The recording/reproducing method according to claim 3, further including comparing recording property data detected at a previous point of change of linear recording speed with the current recording property data to detect the recording properties.

11. The recording/reproducing method according to claim 10, further including setting the linear recording speed for resumption of recording based on a difference between the recording property data detected at the previous change time of the linear recording speed and the current recording property data.

{ Please add the following new claims: }

12. A recording/reproducing apparatus in which a recording signal is written onto a disk, comprising:

a buffer which temporarily stores said recording signal; and

a control means which controls the recording of the recording signal onto the disk during the recording of the recording signal onto the disk so as to interrupt the recording of the recording signal onto the disk when an amount of said recording signal data in said buffer is not greater than an interruption setting value, and to resume the recording of the recording signal onto the disk when the amount of said recording signal data in said

buffer is not less than a resumption setting value during the recording of the recording signal onto said disk,

wherein said control means reproduces the signal written on said disk before the recording is resumed; records, based on this reproduced signal, the recording signal after resuming the recording onto the disk in continuation with the recording signal before the interruption; and detects the recording properties of said disk based on the signal reproduced before said recording is resumed.

13. The apparatus according to claim 12, wherein when recording is resumed, said control circuit sets recording conditions based on said detected recording properties.

14. A recording/reproducing apparatus comprising:

a controller for controlling the recording of a recording signal onto a disk so that the recording signal is recorded onto the disk at a constant linear speed and interrupting the recording of the recording signal onto the disk, reproducing the signal writing on the disk before resuming a reproducing/recording operation, and detecting the recording properties of the disk based on the reproduced signal in order to set the linear speed.

15. The recording/reproducing apparatus according to claim 14, wherein the controller sets the linear recording speed when recording is resumed in accordance with the detected recording properties.

16. The recording/reproducing apparatus according to claim 14, wherein the controller sets the linear recording speed when recording is resumed in accordance with the recording properties detected based on the

reproduced signal reproduced at the linear speed at the time of interruption of recording.

17. The recording/reproducing apparatus according to claim 16, wherein the controller sets the linear recording speed to a speed higher than the linear speed at the time of interruption of recording and of resuming a recording operation, when the detected recording properties fulfill predetermined criteria.

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18. The recording/reproducing apparatus according to claim 16, wherein the controller resumes a recording operation without changing the linear recording speed, when the detected recording properties fulfill predetermined criteria.

19. The recording/reproducing apparatus according to claim 16, wherein the controller reduces the linear recording speed and resumes a recording operation, when the detected recording properties do not meet predetermined criteria.

20. The recording/reproducing apparatus according to claim 16, wherein the controller lowers the linear recording speed and resumes a recording operation, when the detected recording properties indicate that reproduction is not possible.

21. The recording/reproducing apparatus according to claim 14, wherein the controller compares recording property data detected at a

previous point of change of linear recording speed with the current recording property data to detect the recording properties.

A2 22. The recording/reproducing apparatus according to claim 21, wherein the controller sets the linear recording speed for resumption of recording based on a difference between the recording property data detected at the previous change time of the linear recording speed and the current recording property data.

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